

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id **3220425** Component Hydraulic System Fluid NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION method limit/base current History1 History2 Sample Date Client Info VC0780307 WC0667448 Machine Age hrs Client Info 0 0 Oil Age hrs Client Info 0 0 Oil Age hrs Client Info 0 0 WEAR METALS Client Info N/A N/A WEAR METALS method Imit/base current History1 History2 Iron ppm ASTM 05165m >20 9 8 WEAR METALS method Imit/base current History1 History2 Iron ppm ASTM 05165m >10 0 Nickel ppm ASTM 05165m >10 0 Auminum ppm ASTM 05165m >10 0 Auminum ppm				Aprzuzz	F802023		
Sample Date Client Info 24 Feb 2023 05 Apr 2022 Machine Age hrs Client Info 0 0 Oil Age hrs Client Info 0 0 Sample Status Image Client Info N/A N/A WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >20 9 8 Nickel ppm ASTM D5185m >10 <-1 1 Silver ppm ASTM D5185m 10 0 <1 Lead ppm ASTM D5185m >10 0 0 Vanadium ppm ASTM D5185m >10 0 0 Cadmium ppm ASTM D5185m >10 0 Cadmium ppm ASTM D5185m 0 0	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 0 0 Oil Age irrs Client Info 0 0 Sample Status Image N/A N/A N/A WEAR METALS method Imit/base current history1 history2 Iron ppm ASTM D5185m >20 9 8 Nickel ppm ASTM D5185m >10 0 0 Titanium ppm ASTM D5185m >10 0 Aluminum ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Aduminum ppm ASTM D5185m >10 0 Cadium ppm ASTM D5185m 0 0 ADDITVES method imit/base current history1 history2 </th <th>Sample Number</th> <th></th> <th>Client Info</th> <th></th> <th>WC0780307</th> <th>WC0667448</th> <th></th>	Sample Number		Client Info		WC0780307	WC0667448	
Oil Age Inrs Client Info 0 0 Oil Changed Client Info N/A N/A Sample Status 0 Imit/base current history1 history2 Iron ppm ASTM D5185m >20 9 8 Chromium ppm ASTM D5185m >10 c1 1 Nickel ppm ASTM D5185m >10 o1 Aluminum ppm ASTM D5185m >10 0 Aluminum ppm ASTM D5185m >10 0 Lead ppm ASTM D5185m >10 0 Anuminum ppm ASTM D5185m >10 0 Vanadium ppm ASTM D5185m >10 0 AstM D5185m 20 0 0	Sample Date		Client Info		24 Feb 2023	05 Apr 2022	
Oil Changed Sample Status Client Info N/A N/A ABNORMAL	Machine Age	hrs	Client Info		0	0	
Sample Status Image NORMAL ABNORMAL WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >20 9 8 Chromium ppm ASTM D5185m >10 <1 1 Nickel ppm ASTM D5185m 0 <1 Aluminum ppm ASTM D5185m 0 <1 Aluminum ppm ASTM D5185m >10 0 <1 Aduminum ppm ASTM D5185m >10 0 <1 Aduminum ppm ASTM D5185m >10 0 <1 Adminum ppm ASTM D5185m 0 0 0 Adminum ppm ASTM D5185m 0 0	Oil Age	hrs	Client Info		0	0	
WEAR METALS method imit/base current history1 history2 Iron ppm ASTM D5185m >20 9 8 Ohromium ppm ASTM D5185m >10 0 0 Nickel ppm ASTM D5185m 0 <1 Silver ppm ASTM D5185m 0 <1 Aluminum ppm ASTM D5185m >10 0 <1 Lead ppm ASTM D5185m >10 0 <1 Vanadium ppm ASTM D5185m >10 0 <1 Vanadium ppm ASTM D5185m 0 0 0 ADDITIVES method Imit/base current history1 history2 Boron ppm ASTM D5185m 0 0 0 Adignesitium ppm ASTM D5185m 136 136	Oil Changed		Client Info		N/A	N/A	
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Chromium ppm ASTM D5185m >10 <1	WEAR METALS		method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >10 0 Titanium ppm ASTM D5185m 0 <1 Silver ppm ASTM D5185m 0 <1 Aluminum ppm ASTM D5185m >10 0 <1 Aluminum ppm ASTM D5185m >10 0 <1 Copper ppm ASTM D5185m >75 5 5 Tin ppm ASTM D5185m >10 0 <1 Cadmium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 2 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 1 2 Magaenese ppm ASTM D5185m 26 19 Calcium ppm	Iron	ppm	ASTM D5185m	>20	9	8	
Titanium ppm ASTM D5185m 0 <1	Chromium	ppm	ASTM D5185m	>10	<1	1	
Silver ppm ASTM D5185m 0 <1	Nickel	ppm	ASTM D5185m	>10	0	0	
Aluminum ppm ASTM D5185m >10 0 <1	Titanium	ppm	ASTM D5185m		0	<1	
Lead ppm ASTM D5185m<>10 0 0 Copper ppm ASTM D5185m<>75 5 5 Tin ppm ASTM D5185m<>10 0 <1 Vanadium ppm ASTM D5185m 0 0 Cadmium ppm ASTM D5185m 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 2 Malganese ppm ASTM D5185m 26 19 Magnesium ppm ASTM D5185m 327 321 Zinc ppm ASTM D5185m 394 377 Sulfur ppm ASTM D5185m 20 2 1 Sulfur ppm ASTM D5185m 20 2 1 Sodium ppm ASTM D5185m 20 0	Silver	ppm	ASTM D5185m		0	<1	
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Boron ppm ASTM D5185m 0 2 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 1 2 Manganese ppm ASTM D5185m 1 2 Magnesium ppm ASTM D5185m 26 19 Calcium ppm ASTM D5185m 26 19 Calcium ppm ASTM D5185m 227 321 Zinc ppm ASTM D5185m 394 3777 Sulfur ppm ASTM D5185m 394 3777 Sulfur ppm ASTM D5185m 20 2 1 Sodium ppm ASTM D5185m >20 2 1 Sodium ppm ASTM D5185m >20 0 0 Potassium ppm ASTM D7647 >5000 3109	Cadmium	ppm	ASTM D5185m		0	0	
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 1 2 Manganese ppm ASTM D5185m <1 <1 Magnesium ppm ASTM D5185m 26 19 Calcium ppm ASTM D5185m 26 136 Calcium ppm ASTM D5185m 327 321 Zinc ppm ASTM D5185m 394 377 Sulfur ppm ASTM D5185m 4491 4321 Sulfur ppm ASTM D5185m >20 2 1 Sodium ppm ASTM D5185m >20 0 0 Potassium ppm ASTM D5185m >20 0 0 FLUID CLEANLINESS method imit/base current history1 history2 Particles >4µm ASTM D7647 >5000	ADDITIVES		method	limit/base	current	history1	history2
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Zinc ppm ASTM D5185m 394 377 Sulfur ppm ASTM D5185m 4491 4321 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 2 1 Sodium ppm ASTM D5185m >20 2 1 Sodium ppm ASTM D5185m >20 0 1 Potassium ppm ASTM D5185m >20 0 0 FLUID CLEANLINESS method limit/base current history1 history2 Particles >4µm ASTM D7647 >5000 3109 26218 Particles >6µm ASTM D7647 >100 342 1277 Particles >14µm ASTM D7647 >10 2 0 Particles >21µm ASTM D7647 >10 2 0 Part	Calcium	ppm	ASTM D5185m		136	136	
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Particles >4μm ASTM D7647 >5000 3109 ▲ 26218 Particles >6μm ASTM D7647 >1300 342 1277 Particles >14μm ASTM D7647 >160 39 34 Particles >21μm ASTM D7647 >40 8 10 Particles >21μm ASTM D7647 >40 8 0 Particles >38μm ASTM D7647 >10 2 0 Particles >71μm ASTM D7647 >3 0 0 Oll Cleanliness ISO 4406 (c) >19/17/14 19/16/12 ≥2/17/12 FLUID DEGRADATION method limit/base current history1 history2	Potassium	ppm	ASTM D5185m	>20	0	0	
Particles >6μm ASTM D7647 >1300 342 1277 Particles >14μm ASTM D7647 >160 39 34 Particles >14μm ASTM D7647 >160 39 34 Particles >21μm ASTM D7647 >40 8 10 Particles >38μm ASTM D7647 >10 2 0 Particles >38μm ASTM D7647 >3 0 0 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/16/12 ≥2/17/12 FLUID DEGRADATION method limit/base current history1 history2	FLUID CLEANLIN	ESS	method	limit/base	current	history1	history2
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Particles >21μm ASTM D7647 >40 8 10 Particles >38μm ASTM D7647 >10 2 0 Particles >38μm ASTM D7647 >10 2 0 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/16/12 22/17/12 FLUID DEGRADATION method limit/base current history1 history2	Particles >6µm		ASTM D7647	>1300	342	1277	
Particles >38μm ASTM D7647 >10 2 0 Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/16/12 22/17/12 FLUID DEGRADATION method limit/base current history1 history2	Particles >14µm		ASTM D7647	>160	39	34	
Particles >71μm ASTM D7647 >3 0 0 Oil Cleanliness ISO 4406 (c) >19/17/14 19/16/12 ▲ 22/17/12 FLUID DEGRADATION method limit/base current history1 history2	Particles >21µm		ASTM D7647	>40	8	10	
Oil Cleanliness ISO 4406 (c) >19/17/14 19/16/12 ▲ 22/17/12 FLUID DEGRADATION method limit/base current history1 history2	Particles >38µm		ASTM D7647	>10	2	0	
FLUID DEGRADATION method limit/base current history1 history2	Particles >71µm		ASTM D7647	>3	0	0	
	Oil Cleanliness		ISO 4406 (c)	>19/17/14	19/16/12	🔺 22/17/12	
Acid Number (AN) mg KOH/g ASTM D8045 0.30 0.38	FLUID DEGRADA		method	limit/base	current	history1	history2
	Acid Number (AN)	mg KOH/g	ASTM D8045		0.30	0.38	



OIL ANALYSIS REPORT

scalar

scalar

scalar

scalar

White Metal

Yellow Metal

Precipitate

Silt

Debris

*Visual

*Visual

*Visua

*Visual

scalar *Visual

NONE

NONE

NONE

NONE

NONE

Feb24/23

Feb24/23

: 05 Apr 2023

: 10 Apr 2023

: Don Baldridge

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Diagnostician

Received

Diagnosed

(B/HOX 0.30

0.20

0.00

Acid

Acid Number

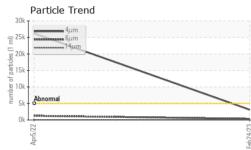
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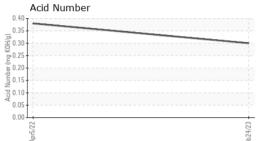
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NONE

NONE

NONE

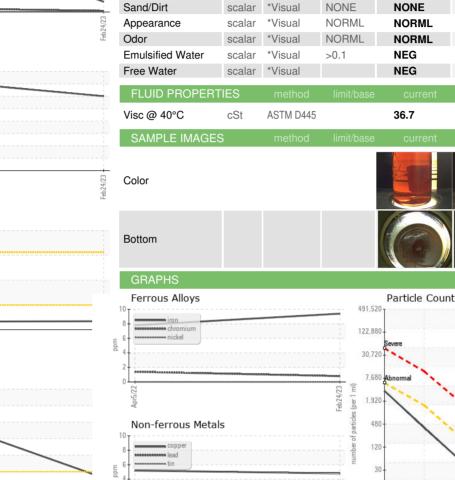




Viscosity @ 40°C

55

5





NONE

NONE

NONE

NONE

NONE

NONE

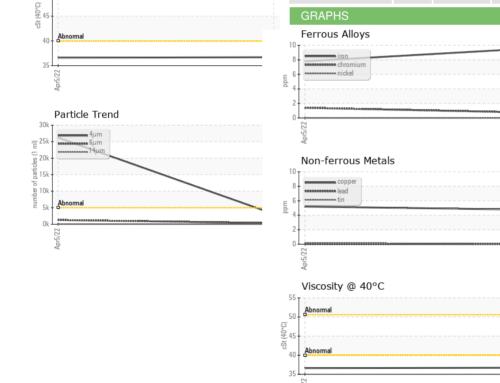
NORML

NORML

NEG

NEG

36.6



Laboratory

Sample No.

Lab Number

Unique Number

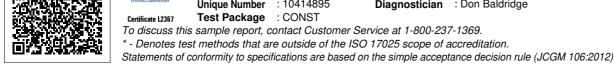
Test Package : CONST

: WC0780307

:05812103

: 10414895

PALFINGER - BRANCH 410 632 CEDAR SWAMP RD JACKSON, NJ US 08527 Contact: DON DRESS d.dress@palfinger.com T: F:



Submitted By: TECHNICIAN ACCOUNT

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28

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